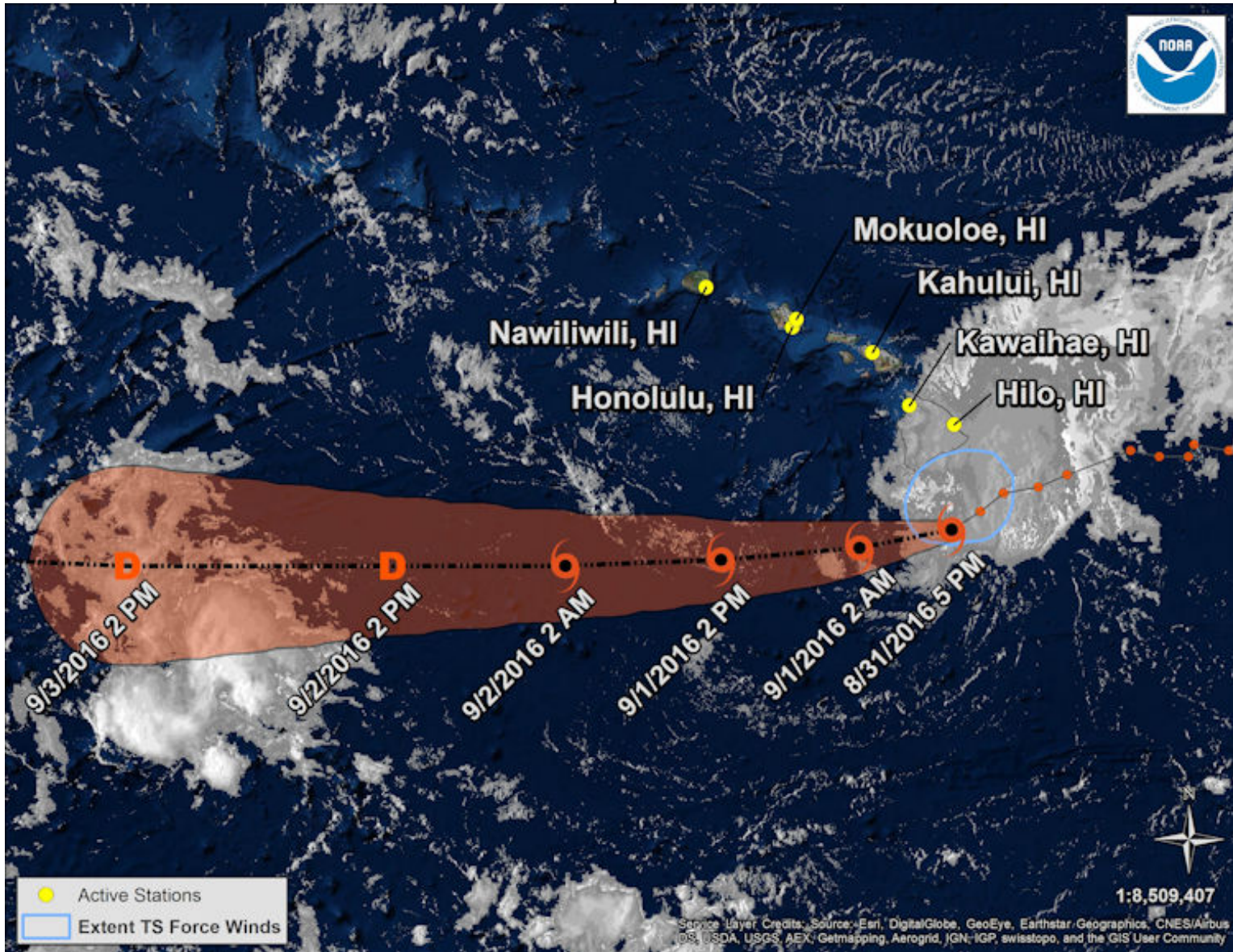




# Tropical Storm MADELINE QuickLook Posted: 18:00 HST 08/31/2016

NOAA and NOAA Partnership Stations Relative to the Storm



## Storm Analysis

As of 8/31/2016 18:00 HST, water levels across the Hawaiian Islands are slightly elevated and range between 0.3 and 0.7 feet above normal tide levels. Madeline is weakening and passing just south of the Island of Hawaii. Winds are generally 25 knots or less with some higher gusts to 40 knots on the Big Island. Barometric pressure continues to fall across the Hawaiian Islands.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst:CMF

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SELECT CENTRAL PACIFIC HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM MADELINE ADVISORY NUMBER 23  
NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI EP142016  
500 PM HST WED AUG 31 2016

...WEAKENING TROPICAL STORM MADELINE PASSING JUST SOUTH OF THE BIG ISLAND...

SUMMARY OF 500 PM HST...0300 UTC...INFORMATION

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LOCATION...18.0N 155.1W  
ABOUT 115 MI...190 KM S OF HILO HAWAII  
ABOUT 290 MI...470 KM SE OF HONOLULU HAWAII  
MAXIMUM SUSTAINED WINDS...65 MPH...100 KM/H  
PRESENT MOVEMENT...WSW OR 250 DEGREES AT 12 MPH...19 KM/H  
MINIMUM CENTRAL PRESSURE...998 MB...29.47 INCHES

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY:

None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...

- \* Hawaii County
- \* Maui County including the islands of Maui, Molokai, Lanai and Kahoolawe

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the watch area, in this case over the next 12 to 18 hours. Preparations to protect life and property should be complete.

For storm information specific to your area, please monitor products issued by the National Weather Service office in Honolulu Hawaii.

DISCUSSION AND 48-HOUR OUTLOOK

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At 500 PM HST (0300 UTC), the center of Tropical Storm Madeline was located near latitude 18.0 North, longitude 155.1 West. Madeline is moving toward the west-southwest near 12 mph (19 km/h). This general motion is expected to continue tonight with a gradual turn toward the west on Thursday and Friday.

Maximum sustained winds are near 65 mph (100 km/h) with higher gusts. Steady weakening is expected over the next couple of days.

Tropical-storm-force winds extend outward up to 105 miles (165 km) from the center. Wind gusts as high as 60 mph (97 km/h) have been reported in North Kohala in Hawaii County today.

The estimated minimum central pressure is 998 mb (29.47 inches).

#### HAZARDS AFFECTING LAND

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WIND: Tropical storm conditions are expected to continue over Hawaii County and isolated portions of Maui County tonight. Winds will be strongest over mountains and where winds blow downslope from higher terrain.

SURF: Swells generated by Madeline are peaking across Hawaiian waters through the evening evening, and could be damaging along east facing shores of Hawaii County, especially in the Puna and Kau Districts.

RAIN: Madeline is expected to produce total rain accumulations of 5 to 10 inches, with isolated maximum amounts near 15 inches, across Hawaii County, especially over windward areas and the Kau District. Total rainfall accumulations of 1 to 3 inches, with isolated maximum amounts up to 4 inches, can be expected in the islands of Maui County, mainly over windward terrain. This rainfall may lead to dangerous flash floods and mudslides.

#### NEXT ADVISORY

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Next intermediate advisory at 800 PM HST.

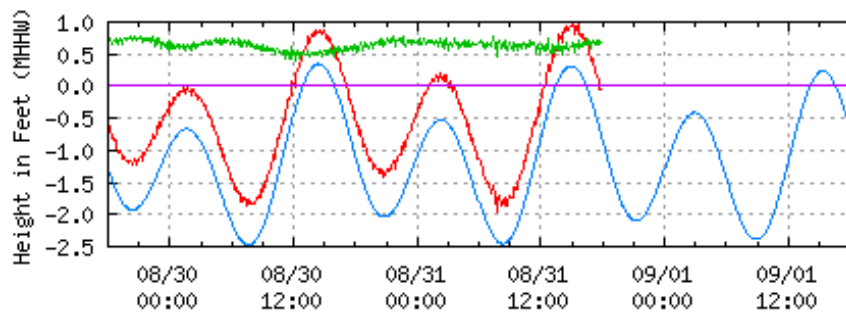
Next complete advisory at 1100 PM HST.

Forecaster Wroe

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Hilo, Hilo Bay, Kuhio Bay - Water Level](#), [Hilo, Hilo Bay, Kuhio Bay - Winds](#), [Hilo, Hilo Bay, Kuhio Bay - Barometric](#), [Kawaihae - Water Level](#), [Kawaihae - Winds](#), [Kawaihae - Barometric](#), [Kahului, Kahului Harbor - Water Level](#), [Kahului, Kahului Harbor - Winds](#), [Kahului, Kahului Harbor - Barometric](#), [Mokuoloe - Water Level](#), [Mokuoloe - Winds](#), [Mokuoloe - Barometric](#), [Honolulu - Water Level](#), [Honolulu - Winds](#), [Honolulu - Barometric](#), [Nawiliwili - Water Level](#), [Nawiliwili - Winds](#), [Nawiliwili - Barometric](#)

NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/31/2016 17:48 (HST). Data relative to MHHW

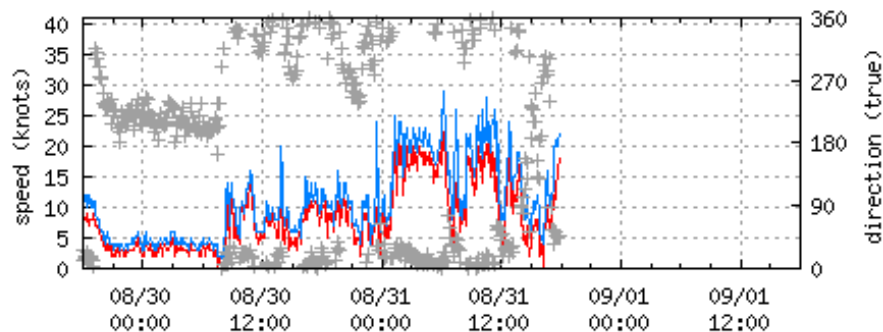
Observed: -0.06 ft. Predicted: -0.74 ft. Residual: 0.68 ft.

Historical Maximum Water Level: Jan 20 1981, 1.37 ft.

Next High Tide: 09/01/2016 02:56 (HST), -0.41 ft.

NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI

Wind Speed / Gusts / Direction

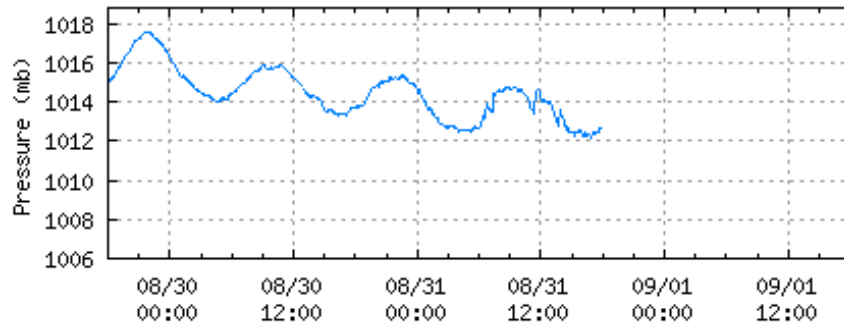


speed — gusts — direction +

Last Observed Sample: 08/31/2016 17:48 (HST)

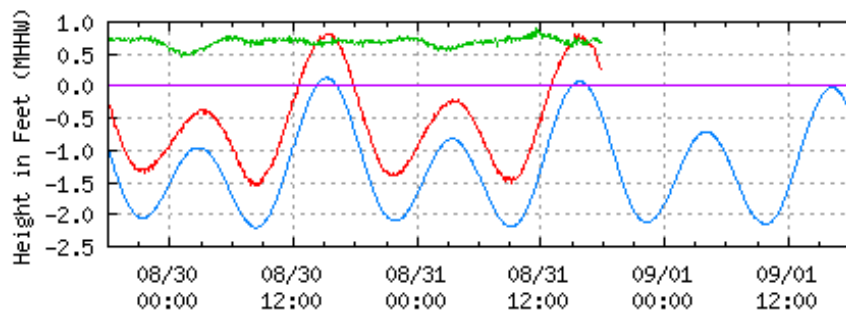
Wind Speed: 18 knots Gusts: 22 knots Direction: 46° T

NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI  
Barometric Pressure



barometric pressure —  
Last Observed Sample: 08/31/2016 17:48 (HST)  
Barometric Pressure: 1012.7 mb

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/31/2016 17:48 (HST). Data relative to MHHW

Observed: 0.27 ft. Predicted: -0.42 ft. Residual: 0.69 ft.

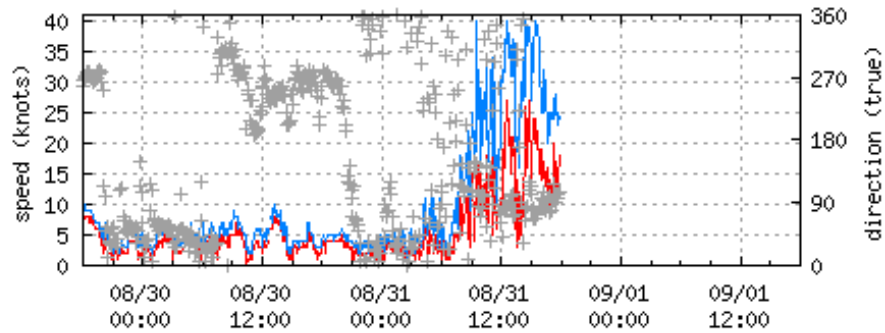
Historical Maximum Water Level: Dec 13 2008, 1.22 ft.

Next High Tide: 09/01/2016 04:02 (HST), -0.71 ft.



NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Wind Speed / Gusts / Direction



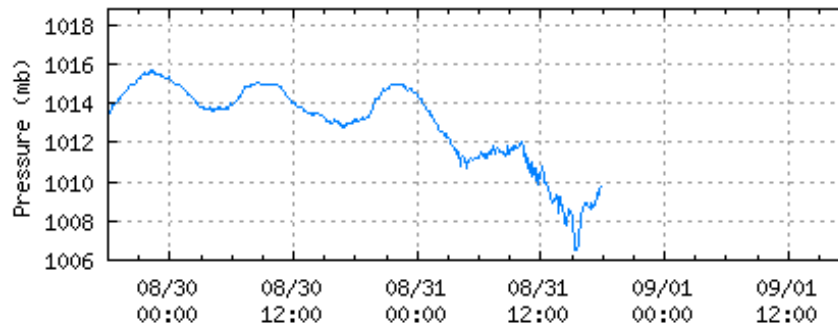
speed — gusts — direction +

Last Observed Sample: 08/31/2016 17:48 (HST)

Wind Speed: 18 knots Gusts: 24 knots Direction: 106° T

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Barometric Pressure

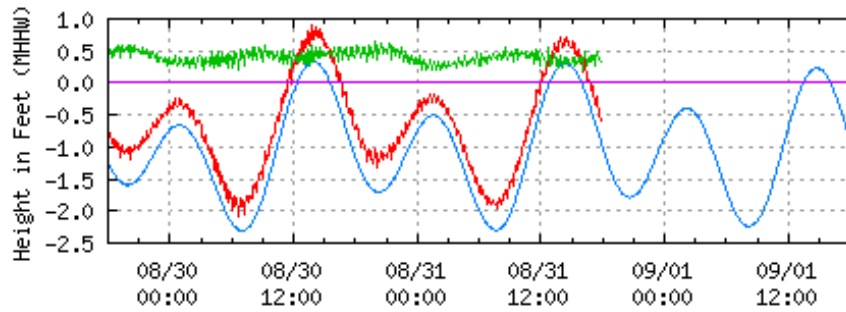


barometric pressure —

Last Observed Sample: 08/31/2016 17:48 (HST)

Barometric Pressure: 1009.7 mb

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

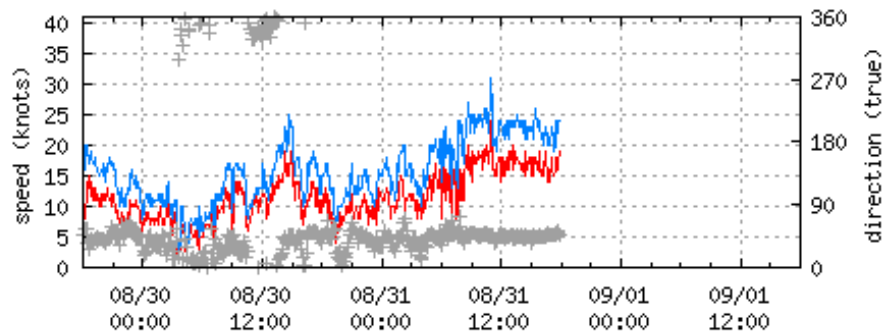
Last Observed Sample: 08/31/2016 17:48 (HST). Data relative to MHHW

Observed: -0.59 ft. Predicted: -0.91 ft. Residual: 0.32 ft.

Historical Maximum Water Level: Dec 20 1968, 1.23 ft.

Next High Tide: 09/01/2016 02:10 (HST), -0.40 ft.

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI  
Wind Speed / Gusts / Direction

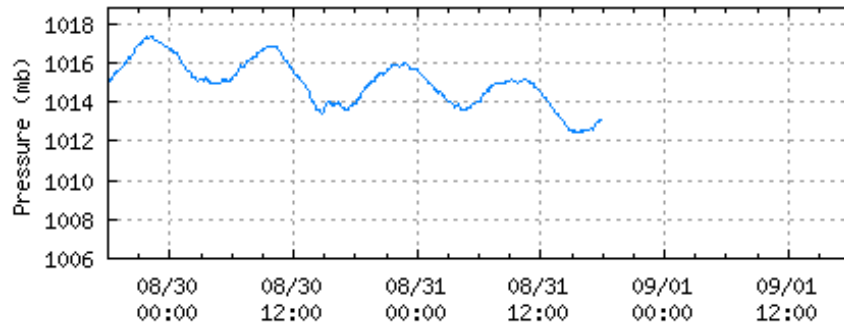


speed — gusts — direction +

Last Observed Sample: 08/31/2016 17:48 (HST)

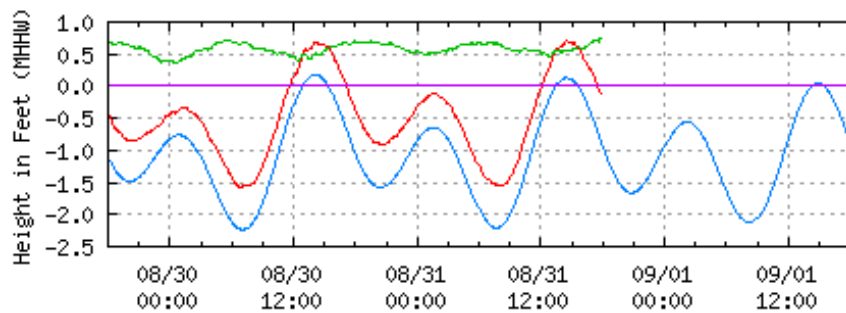
Wind Speed: 19 knots Gusts: 24 knots Direction: 48° T

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI  
Barometric Pressure



barometric pressure —  
Last Observed Sample: 08/31/2016 17:48 (HST)  
Barometric Pressure: 1013.1 mb

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



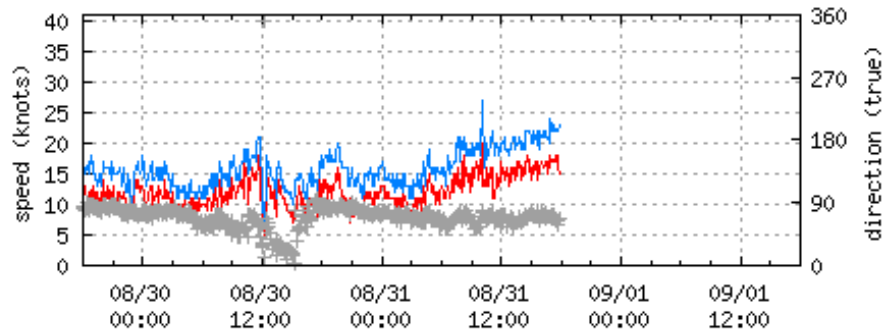
Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/31/2016 17:48 (HST). Data relative to MHHW  
Observed: -0.11 ft. Predicted: -0.85 ft. Residual: 0.74 ft.  
Historical Maximum Water Level: Jan 8 1974, 1.46 ft.  
Next High Tide: 09/01/2016 02:12 (HST), -0.56 ft.



# NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

Wind Speed / Gusts / Direction



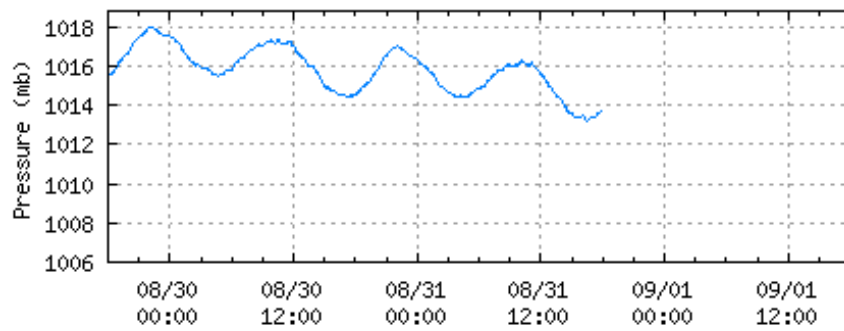
speed — gusts — direction +

Last Observed Sample: 08/31/2016 17:48 (HST)

Wind Speed: 15 knots Gusts: 23 knots Direction: 67° T

# NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

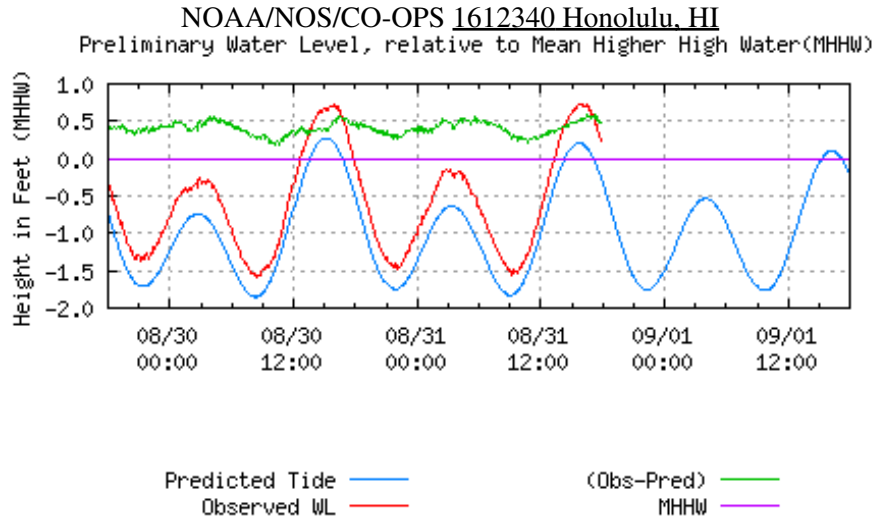
Barometric Pressure



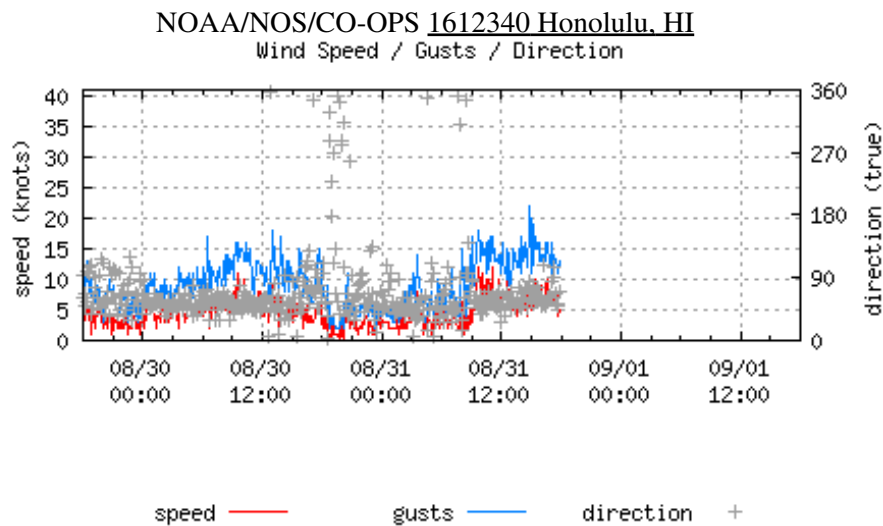
barometric pressure —

Last Observed Sample: 08/31/2016 17:48 (HST)

Barometric Pressure: 1013.7 mb

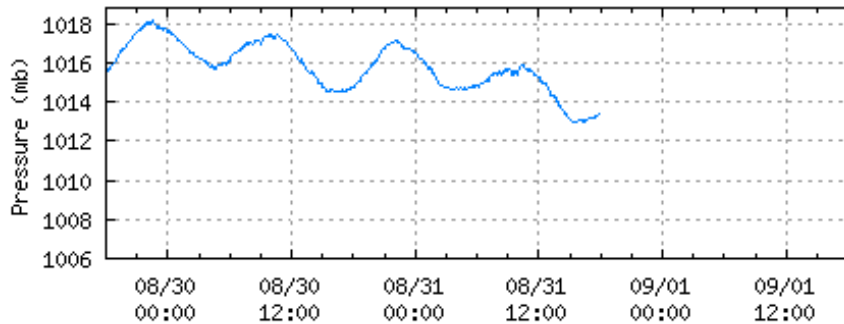


Last Observed Sample: 08/31/2016 17:48 (HST). Data relative to MHHW  
**Observed: 0.24 ft. Predicted: -0.24 ft. Residual: 0.48 ft.**  
 Historical Maximum Water Level: Feb 14 1967, 1.49 ft.  
 Next High Tide: 09/01/2016 04:00 (HST), -0.53 ft.



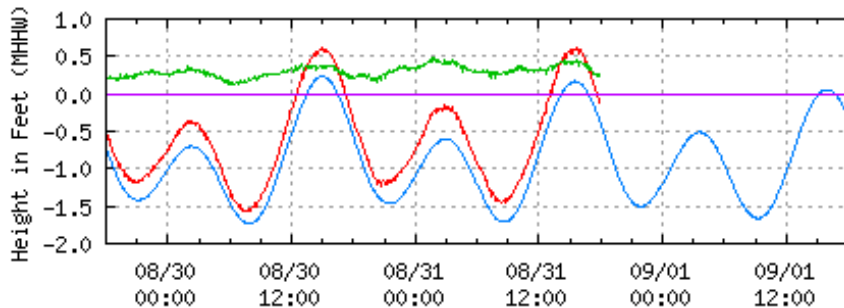
Last Observed Sample: 08/31/2016 17:48 (HST)  
**Wind Speed: 5 knots Gusts: 13 knots Direction: 70° T**

NOAA/NOS/CO-OPS 1612340 Honolulu, HI  
Barometric Pressure



barometric pressure —  
Last Observed Sample: 08/31/2016 17:48 (HST)  
Barometric Pressure: 1013.4 mb

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)

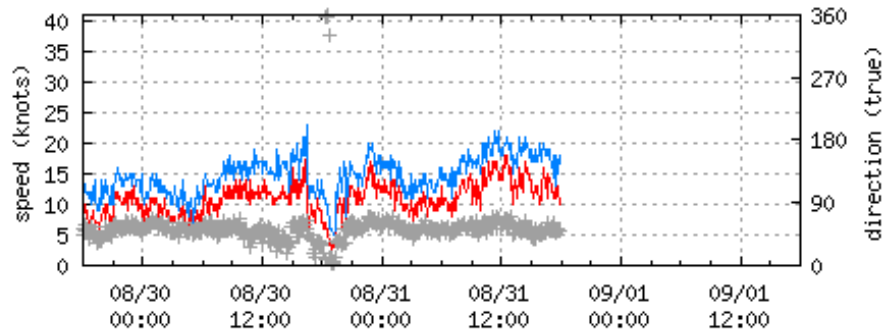


Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/31/2016 17:54 (HST). Data relative to MHHW  
Observed: -0.11 ft. Predicted: -0.37 ft. Residual: 0.26 ft.  
Historical Maximum Water Level: Sep 11 1992, 3.15 ft.  
Next High Tide: 09/01/2016 03:37 (HST), -0.51 ft.

# NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Wind Speed / Gusts / Direction



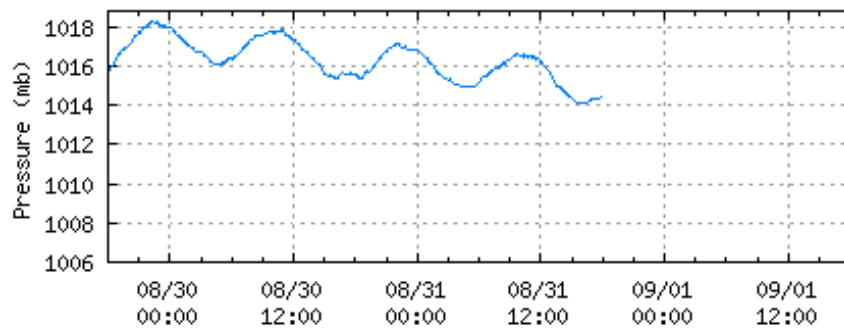
speed — gusts — direction +

Last Observed Sample: 08/31/2016 17:54 (HST)

Wind Speed: 10 knots Gusts: 18 knots Direction: 50° T

# NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Barometric Pressure



barometric pressure —

Last Observed Sample: 08/31/2016 17:54 (HST)

Barometric Pressure: 1014.4 mb

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
1617760	Hilo, Hilo Bay, Kuhio Bay, HI	08/31/2016 17:48 (HST)	-0.06 ft	-0.74 ft	0.68 ft	0.98 ft
1617433	Kawaihae, HI	08/31/2016 17:48 (HST)	0.27 ft	-0.42 ft	0.69 ft	0.81 ft
1615680	Kahului, Kahului Harbor, HI	08/31/2016 17:48 (HST)	-0.59 ft	-0.91 ft	0.32 ft	0.71 ft
1612480	Mokuoloe, HI	08/31/2016 17:48 (HST)	-0.11 ft	-0.85 ft	0.74 ft	0.70 ft
1612340	Honolulu, HI	08/31/2016 17:48 (HST)	0.24 ft	-0.24 ft	0.48 ft	0.74 ft
1611400	Nawiliwili, HI	08/31/2016 17:54 (HST)	-0.11 ft	-0.37 ft	0.26 ft	0.62 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
National Oceanic and Atmospheric Administration | U.S. Department of Commerce